

CLAIMS

We Claim:

- 5 1. A composition comprising:
between about 10 weight percent to 90 weight of a material selected from the group
consisting of natural rubber, synthetic rubber, and plastic; and between about 85 weight
percent and 5 percent of a zeolite dried at between 50°C and 150° for between about four
and twenty four hours, and ground to a size smaller than 300 mesh.
- 10 2. The composition of claim 1 wherein the composition includes a foamed rubber
material.
3. The composition of claim 2 wherein the foamed rubber is selected from the group
15 consisting of closed cell foam and open cell foam
4. The rubber composition of claim 3 wherein the foamed rubber is selected from
the group consisting of open cell foam rubber.
- 20 5. The composition of claim 1 wherein the composition includes a foamed rubber
composition having a latex selected from the group consisting of natural latex, isoprenes,
polyisoprenes, styrene butadienes, nitrile rubbers, butyl rubbers, ethylene propylene
terpolymers, silicone rubbers, neoprenes, polysulfide, poly acetyl, eperchloride,
fluoroelastomers, hypalon, halogenated butyl, polyurethanes, and thermoplastic rubbers.
- 25 6. The composition of claim 1 wherein the zeolite is selected from the group
consisting of chabzite, eroionite, mordenite, chinoptilolite, faujasite, philipsite, zeolite A,
zeolite L, Zeolite Y, zeolite X and ZSM-5.
- 30 7. The rubber composition of claim 6 wherein the zeolite is chinoptilolite.

8. The composition of claim 1 wherein the composition further includes a stabilizer selected from the group consisting of alkaline earth carbonates, and other alkali metal carbonates and alkaline earth carbonates, and other alkali metal bicarbonates.
- 5 9. The composition of claim 8 wherein the composition includes a stabilizer of alkaline earth carbonates in the form of limestone.
- 10 10. The composition of claim 9 wherein the stabilizer is selected from the group consisting of calcium carbonate, magnesium carbonate, sodium carbonate, potassium carbonate, sodium bicarbonate and potassium bicarbonate.
11. A method of making a rubber composition comprising:
adding to a rubberized compound in its liquid state, and a zeolite dried at between 50°C and 150° for between about four and twenty four hours, and ground to a size smaller than
15 300 mesh;
molding the liquid material; and
shaping the solidified material.
12. The method of making a rubber composition of claim 11 wherein the rubberized
20 carrier material is selected from the group of latexes consisting of natural latex, isoprenes, polyisoprenes, styrene butadienes, nitrile rubbers, butyl rubbers, ethylene propylenes terpolymers, silicone rubbers, neoprenes, polysulfides, poly acetyls, eperchlorides, fluoroelastomers, hypalon, halogenated butyls, polyurethanes, and thermoplastic rubbers.
- 25 13. The method of making a rubber composition of claim 12 wherein the zeolite is selected from the group consisting of chabzite, eroionite, mordenite, chinoptilolite, faujasite, philipsite, zeolite A, zeolite L, Zeolite Y, zeolite X and ZSM-5.
- 30 14. The method of making rubber composition of claim 13 wherein the zeolite is chinoptilotlite.

15. The method of making a rubber composition of claim 11 wherein the formulation includes at least one stabilizer selected from the group consisting of alkaline earth carbonates, and other alkali metal carbonates and alkaline earth carbonates, and other
5 alkali metal bicarbonates.

16. The method of making a rubber composition of claim 15 wherein the stabilizer is selected from the group consisting of calcium carbonate, magnesium carbonate, sodium carbonate, potassium carbonate, sodium bicarbonate and potassium bicarbonate.

10

17. The method of making a rubber composition of claim 11 wherein the shaping step further comprises molding the insert from a liquid rubber zeolite composition.

18. The method of making rubber composition of claim 11 wherein the shaping step
15 further comprises forming a sheet of a rubber zeolite composition, and cutting inserts of the appropriate size and shape.

19. A method of freshening the inside of shoes comprising:
placing a renewable insert comprising a rubberized matrix and a zeolitic odor absorbent
20 in the inside of the shoe.

20. The method of claim 19 wherein the rubberized carrier material are selected from the group of latexes consisting of natural latex, isoprenes, polyisoprenes, styrene butadienes, nitrile rubbers, butyl rubbers, ethylene propylene terpolymers, silicone
25 rubbers, neoprenes, polysulfides, poly acetyls, eperchloride, fluporelastomers, hypalon, halogenated butyl, polyurethanes, and thermoplastic rubbers.

21. The method of freshening the inside of shoes of claim 19 wherein the zeolite is selected from the group consisting of chabzite, eroionite, mordenite, chinoptilolite,
30 faujasite, philipsite, zeolite A, zeolite L, Zeolite Y, zeolite X and ZSM-5.

22. The method of freshening the inside of shoes of claim 21 wherein the zeolite is chinoptilolite.

23. The method of freshening the inside of shoes of claim 19 wherein the stabilizer is
5 selected from the group consisting of alkaline earth carbonates, and other alkali metal carbonates and alkaline earth carbonates, and other alkali metal bicarbonates.

24. The method freshening the inside of shoes of claim 23 wherein the stabilizer is
10 selected from the group consisting of calcium carbonate, magnesium carbonate, sodium carbonate, potassium carbonate, sodium bicarbonate and potassium bicarbonate.

25. The method of freshening the inside shoes of claim 23 wherein the method further includes removing the shoe insert from the interior of the shoe and regenerating it by heating it to between about 50° and 150° for between about one hour and ten hours.

15

26. The method of freshening the inside of shoes of claim 25 wherein the insert is removed from the shoe and placed in direct sunlight for between about 4 to ten hours.